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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,389	12/23/2003	Masahiko Matsukawa	27620-00003-US	7940

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EXAMINER	
KRUER, KEVIN R	

ART UNIT	PAPER NUMBER
1794	

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04/13/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/743,389	MATSUKAWA ET AL.	
	Examiner	Art Unit	
	KEVIN R. KRUER	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 December 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,8,9,13,15 and 18* is/are pending in the application.

4a) Of the above claim(s) *1,13,15 and 18* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *8 and 9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Election/Restrictions

2. Newly submitted claims 1, 13, 15, and 18 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: said claims are directed to a method of electro-coating a pretreated substrate. Previously, all the claims were drawn to a conversion coating agent for use in pretreatment of a cationic electro-coating and a substrate coated with said conversion coating agent. Said claims are drawn to a patentably distinct invention because they are drawn to a different statutory class of invention and would have been restrictable from the previously examined claims if presented simultaneously. For example, the process could have been used to make a materially different product since the process is drawn to a conversion coating "comprising" the claimed components. The product also could have been made by a materially different process-such as a process not including a water rinse.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 1, 13, 15, and 18 are withdrawn from

consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dolan (US 5,449,415) in view of (a) WO01/48264 (herein referred to as Sako) and (b) Tominaga et al (US 4,287,041) or Hayashi et al (US 5,089,101) .

Dolan teaches a chromium free conversion coating for a metal substrate (abstract). The metal substrate may be iron, aluminum, zinc, steel and alloys thereof (col 1, lines 13+). The surface of the metal is degreased rinsed with water, and then contacted with / the pretreatment composition (col 9, lines 48+). The pretreatment is applied solution is applied in amounts of 5-500mg/m2 (claim 17). The pretreatment composition comprises the following components:

- A transition metal element (abstract) chosen from the group consisting of zirconium, titanium, and hafnium (abstract)in amounts of 0.15-1.0M/kg (col 5, lines 33+);

-A fluorine-containing materials as a source of fluorine ions (abstract-component (i))

-1-10wt% of a water soluble or water-dispersible organic polymer (component E-abstract) such as an epoxy or aminoplast (col 5, lines 66+);

-Acid in amounts sufficient to adjust the pH of the treating solution to about 0.5-5 (abstract);

-Cobalt, magnesium, nickel, tin, iron, copper, zinc ions (col 6, lines 20+); And

-silica (table 2) optionally a peroxide (component F) in amounts to provide a concentration of oxidizing equivalents per liter or composition that is equal to that of a composition comprising 1-9wt% hydrogen peroxide (col 6, lines 19+)-herein relied upon to read on the reaction accelerator.

Dolan does not teach an organic resin comprising an epoxy compound containing an isocyanate group may be added to the composition. However, Sako teaches a chromium-free rinse composition wherein the organic resin of said composition comprises cation modified epoxy resin AdekaresinTM (col 15, d3), one of applicant's preferred epoxy resins containing an amino group (see page 8 of the specification). Sako further teaches said resin may be crosslinked with an isocyanate group (col 12, lines 14+). Said resin improves the corrosion resistance, fingerprint resistance and workability of the composition (col 5, lines 47+). Thus, it would have been obvious to one of ordinary skill in the art to utilize sufficient amounts of the isocyanate cured Adekaresin taught in Sako to the conversion coating composition taught in Dolan. The motivation for doing so would have been to improve the composition's corrosion resistance, fingerprint resistance and workability of the composition.

Sako teaches the claimed cation modified epoxy resin but does not teach that the isocyanate crosslinking agent may be partially blocked and reacted with the epoxy resin prior to curing. However, Tominaga teaches corrosion resistant film for metallic substrates comprising an adduct of an epoxy resin with an amine which may be reacted with a partially blocked polyisocyanate curing agent (col 6, lines 58+). Similarly, Hayashi teaches a corrosion resistant coating for metallic substrate wherein adduct of

epoxy and amine (col 10, lines 27+) may be reacted with a partly blocked isocyanate curing agent (col 11, lines 60+). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to partially block the polyisocyanate curing agent of Sako and react it with the amino group containing epoxy compound because such methods are commonly used in the art.

Response to Arguments

Applicant's arguments filed 12/31/08 have been fully considered but are moot in view of the new grounds of rejection. In order to expedite prosecution, some of applicant's arguments which may be relevant to the new rejection will be addressed.

Applicant argues the conversion coating agent contains a water soluble epoxy that when blended in the agent increases the adhesion to coating films and improves stability. Applicant points to page 7, lines 14-20 for support of said argument. Said argument has been fully considered but is not persuasive because said result is not unexpected. One would expect an epoxy composition to improve adhesion of an epoxy coating layer (page 23) to a substrate.

Applicant further agues the epoxy preferably adjusts the balance between hydrophilic and hydrophobic properties and therefore has the property of becoming insoluble and precipitating when the pH of an aqueous solution increases and is formed on a chemical conversion coating comprising at least one kind selected from the group consisting of zirconium, titanium, and hafnium. Applicant points to the paragraph bridging pages 7 and 8 for support. Said argument is noted but is not persuasive because it does not agree in scope with the claimed invention. Specifically, the claims

do not require a conversion coating to be formed followed by the precipitation of an epoxy resin coating.

Applicant further agues the claimed invention achieves a coating film showing excellent results through secondary adhesion tests and combined cycle corrosion test (page 32, line 20-page 33, line 2). Said argument has been considered but is not persuasive because applicant has not compared the claimed invention to the closest prior art. Furthermore, said showing is not commensurate in scope with the claimed invention.

Applicant further argues the Adekaresin used in Sako is not an amino group containing water soluble epoxy compound having isocyanate groups ads present claimed. Said argument is not persuasive because AdekaresinTM (col 15, d3) is one of applicant's preferred epoxy resins containing an amino group (see page 8 of the specification).

Applicant's arguments with respect to claims 13, 15, 18 are moot since said claims are withdrawn by original presentation.

For the reasons noted above, the rejections are maintained.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN R. KRUER whose telephone number is (571)272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin R Kruer/
Primary Examiner, Art Unit 1794